



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/766,101

01/28/2004

Chul Woo Park

AMKOR-100A

2186

7663

7590

06/25/2009

STETINA BRUNDA GARRED & BRUCKER
75 ENTERPRISE, SUITE 250
ALISO VIEJO, CA 92656

EXAMINER

DINH, TUAN T

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

06/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHUL WOO PARK,
SUK GU KO, SANG JAE JANG,
SUNG SU PARK, and CHOON HEUNG LEE

Appeal 2009-002985
Application 10/766,101
Technology Center 2800

Decided:¹ June 25, 2009

Before CHUNG K. PAK, CATHERINE Q. TIMM, and
JEFFREY B. ROBERTSON, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1-24. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

I. STATEMENT OF THE CASE

The invention relates to a memory card, for example a multi-media card (MMC), and the method of fabricating the memory card (Spec. ¶ 3). In particular, the memory card eliminates the need for a cap or lid due to a two-stage molding process of forming first and second encapsulation parts on opposed surfaces of a substrate (Spec. ¶¶ 7 and 8). Claim 1 is illustrative of the subject matter on appeal:

1. A memory card, comprising:

a substrate having opposed top and bottom surfaces and a plurality of terminals disposed on the bottom surface thereof;

at least one component mounted to the top surface of the substrate and electrically connected to the terminals thereof;

a first encapsulation part formed on the bottom surface of the substrate; and

a second encapsulation part formed on the top surface of the substrate and encapsulating the component mounted thereto, the second encapsulation part being completely separated from the first encapsulation part by the substrate;

the first and second encapsulation parts each being exposed in the memory card.

The Examiner's maintains the following rejections:

1. Claims 1, 2, 6-12, and 16-23² rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,988,668 B2, issued January 24, 2006 to Osako et al. (hereinafter “Osako”)³;

2. Claims 3, 4, 13 and 14 rejected under 35 U.S.C. § 103(a) as obvious over Osako in view of U.S. Patent No. 6,417,444 B1, issued July 9, 2002, to Hirai et al.;

3. Claim 24 rejected under 35 U.S.C. § 103(a) as obvious over Osako in view of U.S. Patent No. 5,244,840, issued September 14, 1993, to Kodai et al.; and

4. Claims 5 and 15 under 35 U.S.C. § 103(a) as obvious over Osako in view of U.S. Patent No. 6,145,023, issued November 7, 2000, to Iwaskai.

II. ISSUE ON APPEAL

All of the independent claims recite that the first encapsulation portion and the second encapsulation portion (or the mold compound applied to the bottom surface and the mold compound applied to the top surface of the

² The Final Office Action stated the rejection as only directed towards claims 1, 2, 11, 12, and 20, but made findings particularly directed to claims 6-10, 16-19, and 21-23 (Final Office Action, 2-4). The Examiner included the previously unlisted claims in the stated rejection in the Answer (Ans. 3), and Appellants Brief treats the claims as rejected (Br. 6-7). Therefore, the error was harmless.

³ Appellants indicate that dependent claims stand or fall with their respective independent claims (Br. 7) and present no separate arguments with respect to any of the dependent claims. Accordingly, the issue raised with respect to the first rejection, which incorporates all the independent claims, disposes of all the rejections on appeal.

substrate)⁴ be “completely separated” from one another “by the substrate” (*see* claims 1, 11, and 20-22).

The dispositive issue on appeal arising from the contentions of Appellants and the Examiner is: have the Appellants shown that the Examiner reversibly erred in finding that Figures 1-3 of Osako teach first and second encapsulation portions (or the mold compounds applied to the top and bottom surfaces of the substrate) “completely separated” from one another “by a substrate”?

III. FACTUAL FINDINGS

The following Findings of Fact (FF) are relevant to deciding the issue on appeal:

1. The Examiner relies on the first embodiment taught by Osako, illustrated in Figures 1-3 (*see* Final Office Action 7; Ans. 4 and 8).
2. The Examiner finds that sealing portion 3 and sealing portion 8 are a “first encapsulating part” and a “second encapsulating part,” respectively as required by the claims (*see* Final Office Action 2; Ans. 3-4 and 8).
3. The Examiner finds that “[t]he first and second sealing portions (3 and 8) [are] completely separated from each other by the substrate (5) of the IC card/memory body (4), *see* figure 2” (Ans. 8) (emphasis omitted).
4. Osako teaches that “the sealing portion of the IC body 4 is formed from a thermosetting resin material so that contact, with the sealing portion 8, of the resin material 3*a* heated to high temperature causes neither melting nor softening of the sealing portion 8” (Osako, col. 9, l. 65 to col. 10, l. 2).

⁴ Appellants’ arguments do not distinguish between the teachings of Osaka constituting an “encapsulating portion” vs. a “mold compound” (*see generally* Br. and Reply Br.).

5. Figure 2 of Osako shows sealing portion 3 extending around a side surface of substrate 5 and contacting sealing portion 8. (Osako, Figure 2).

Figure 2 of Osako is reproduced below:

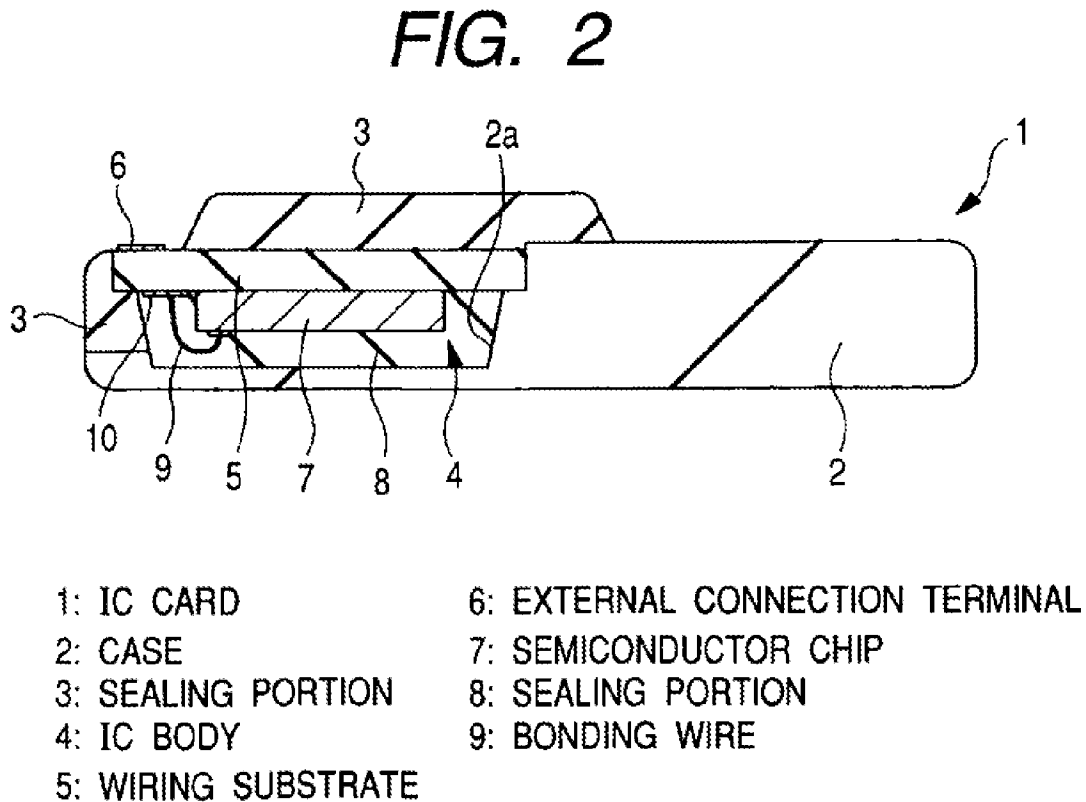


Figure 2 depicts a cross sectional view of an IC card (Osako, col. 2, ll. 46-47).

IV. PRINCIPLES OF LAW

“To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). “A single reference must describe the claimed invention with sufficient precision and detail to establish that the subject matter existed in the prior art.” *Verve, LLC v. Crane Cams, Inc.*, 311 F.3d 1116, 1120 (Fed. Cir. 2002).

V. ANALYSIS

We agree with the Appellants that Figures 1-3 of Osako do not teach sealing portion 3 and sealing portion 8 completely separated by substrate 5. The Examiner's findings to that effect are erroneous (FF 1-3). We find that Osako teaches that sealing portion 3 and sealing portion 8 contact one another (FF 4-5), as shown in Figure 2, and thus are not "completely separated" as required by the claims. Accordingly, the Appellants have shown reversible error in the Examiner's factual findings. Hence, the Examiner has not established that every limitation of the claimed invention is disclosed by Osako.

VI. CONCLUSION

For the reasons discussed above, we cannot sustain the Examiner's rejection of claims 1, 2, 6-12, and 16-23 under 35 U.S.C. § 102(e) as being anticipated by Osako. Since the rejections of the remaining dependent claims also rely upon Osako in the same capacity as applied to claim 1, 2, 6-12, and 16-23 (*see* Ans. 5-7), and the additional references are not relied upon to remedy the above discussed deficiency, we cannot sustain any of the Examiner's rejections.

VII. DECISION

We reverse the Examiner's decision.

REVERSED

Appeal 2009-002985
Application 10/766,101

cam

STETINA BRUNDA GARRED & BRUCKER
75 ENTERPRISE, SUITE 250
ALISO VIEJO CA 92656